
Name of Organization: City of Detroit

Type of Organization: Municipality

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Department of Environmental Affairs

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Project Title: Uniroyal Sediment Assessment and Seawall Investigation Proje

Project Category: Contaminated Sediments

Rank by Organization (if applicable): 1

Total Funding Requested (\$): 100,000 **Project Duration:** 1 Years

Abstract:

The City of Detroit Department of Environmental Affairs is proposing to conduct a sediment assessment and seawall investigation to ascertain whether contamination is migrating from the site commonly referred to as Uniroyal. The Uniroyal site is located within the City of Detroit, adjacent to the Detroit River. More specifically, the property which consist of four individual parcels are bound by Meldrum street to the west, McArthur Bridge to the east, East Jefferson to the north and the Detroit River to the south, and is approximately three miles east of downtown Detroit.

The Uniroyal Sediment Assessment and Seawall Investigation Project will assist the City by better mapping contamination at the site and by suppling the needed data to support the development of a risk/hazard assessment as well as evaluate innovative remedial alternatives necessary to prevent the migration of contaminants to the Detroit River. This project could also serve as a pilot for assessing the benefits and impacts of the proposed remedial activities, once developed. Furthermore, if the sediments are found to be contaminated, disposal alternatives could be evaluated utilizing the data obtained from the project.

Geographic Areas Affected by the Project

States:

<input type="checkbox"/> Illinois	<input type="checkbox"/> New York
<input type="checkbox"/> Indiana	<input type="checkbox"/> Pennsylvania
<input checked="" type="checkbox"/> Michigan	<input type="checkbox"/> Wisconsin
<input type="checkbox"/> Minnesota	<input type="checkbox"/> Ohio

Lakes:

<input type="checkbox"/> Superior	<input checked="" type="checkbox"/> Erie
<input type="checkbox"/> Huron	<input type="checkbox"/> Ontario
<input type="checkbox"/> Michigan	<input type="checkbox"/> All Lakes

Geographic Initiatives:

<input type="checkbox"/> Greater Chicago	<input type="checkbox"/> NE Ohio	<input type="checkbox"/> NW Indiana	<input checked="" type="checkbox"/> SE Michigan	<input type="checkbox"/> Lake St. Clair
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Primary Affected Area of Concern: Detroit River, MI

Other Affected Areas of Concern: NA

For Habitat Projects Only:

Primary Affected Biodiversity Investment Area: Not Applicable

Other Affected Biodiversity Investment Areas:

Problem Statement:

The Uniroyal site consists of four parcels that were previously owned and operated by Uniroyal Goodrich Tire Company, Inc., Michigan Consolidated Gas Company (MichCon), the Detroit Stove Works and the "Shared Parcel" which refers to a portion of the property owned by both MichCon and Uniroyal. The site is currently owned by the City of Detroit.

Several environmental investigations have been performed at the Uniroyal site to provide an assessment of environmental impacts to the soil and groundwater. Based on the data provided by those investigations, contaminants such as BTEX, PNAs, Barium, Mercury, Selenium, Silver, and Total Cyanide were revealed. The extent of contamination to the soil and groundwater have been characterized which indicates that localized regions of contamination exists on the site. However, groundwater samples taken immediately adjacent to the Detroit River indicates that migration of contaminants to the river is a relevant pathway.

The City of Detroit has requested a mixing zone determination from the Michigan Department of Environmental Quality (MDEQ) Surface Water Quality Division which determined that there was a reasonable potential for the discharge of chemicals to cause or contribute to exceedances of Water Quality Standards. Additionally, mercury being classified as a bioaccumulative contaminant is not permitted to be discharged.

The property boundary of the Uniroyal site adjacent to the Detroit River is boarded by a seawall, which its condition has not been investigated. The City believes that the seawall could possibly act as a hydraulic barrier preventing migration of contaminants from occurring. However, in order for this theory to be accepted, the condition of the seawall must be investigated, and most importantly, the assessment of sediments need to be conducted.

Proposed Work Outcome:

The City of Detroit proposes to conduct an extensive investigation of the condition of the seawall, which will concentrate on the seawall condition as it relates to preventing the migration of contaminants from occurring. This investigation will assist the City in evaluating engineering controls for groundwater migration.

The proposed project will also involve detailed sediment sampling along the two-thousand linear foot river frontage. The data generated from the sediment sampling could be used for modeling to generate a three dimensional profile of sediment contamination. This data will provide the City with the information necessary to effectively evaluate remedial alternatives for addressing the contaminated sediments. In addition to characterizing the conditions of the sediments, disposal alternatives and associated cost will be evaluated.

The analysis to be conducted for the sediments will consist of BTEX, PNAs, Barium, Mercury, Selenium, Silver, and Cyanide. Surficial sediment samples will be collected using a modified drop corer, whereas deeper samples will be collected using the RV Mudpuppy's vibracore.

Project Milestones:	Dates:
Project Initiation/Request for Proposals	10/2000
Selection of Consultants	10/2000
Scope of Work	11/2000
Field Sampling/Seawall Investigation	11/2000
Analytical Data Results	12/2000
Draft Report	12/2000
Final Report	01/2001
Project End	02/2001

☒ Project Addresses Environmental Justice

If So, Description of How:

The sediment investigation would assist the City in determining the need for a more aggressive approach to deterring subsistence fishing from occurring. It has been identified during several site visits that fishing occurs immediately downstream (southwest) of the Uniroyal site. It appears that fishing is being conducted primarily by African American males of low economic status as a supplement to their food supply. Fish consumption warning/advisory signs are posted along the Uniroyal site river frontage and a secured gate surrounds the perimeter, however, trespassing and downstream fish are legitimate concerns.

☒ Project Addresses Education/Outreach

If So, Description of How:

The Uniroyal Sediment Assessment and Seawall Investigation Project will be viewed by most of the regulated community as a bench/pilot study in addressing the assessment of sediments while preparing a Brownfield site for redevelopment. A project of this magnitude is anticipated to receive the attention of various community groups, educational institutions, public and private sector organizations. It is the City of Detroit intentions to publicize the progress of this project as a commitment between the various governmental institutions (federal, state, and local) in dedicating resources necessary to achieve a common goal. The success of this project will be showcased during various seminars and presentations. Lastly, the results of the project will be used to educate agencies that interact with the Department of Environmental Affairs such as Detroit Water and Sewerage Department (DWSD), International Joint Commission (IJC), Southeast Michigan Council of Government (SEMCOG), Amry Corp of Engineers, Detroit River RAP, American Heritage River Project, and the Coast Guards.

Project Budget:

	Federal Share Requested (\$)	Applicant's Share (\$)
Personnel:	15,000	12,000
Fringe:	0	0
Travel:	0	1,000
Equipment:	10,000	0
Supplies:	0	0
Contracts:	75,000	0
Construction:	0	0
Other:	0	0
Total Direct Costs:	100,000	13,000
Indirect Costs:	0	2,000
Total:	100,000	15,000
Projected Income:	0	0

Funding by Other Organizations (Names, Amounts, Description of Commitments):

15% of the entire project cost will be absorbed by the City of Detroit through in-kind contributions and other project support as needed. The City of Detroit will also provide additional staff time, as necessary.

Description of Collaboration/Community Based Support:

This project will complement the Detroit River RAP Contaminated Sediments task force as well as efforts provided by other agencies such as the International Joint Commission (IJC), Army Corp of Engineers, Detroit River RAP, American Heritage River Project, and the Coast Guards.